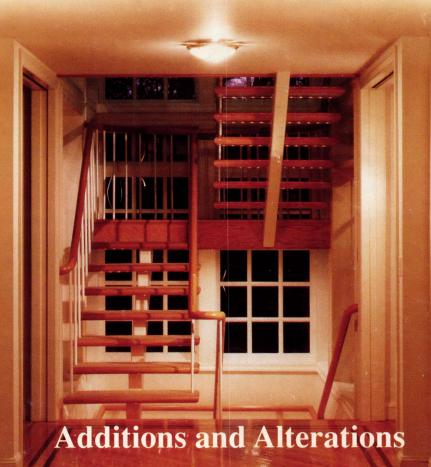
Architecture

Issue 5: 1990

New Jersey





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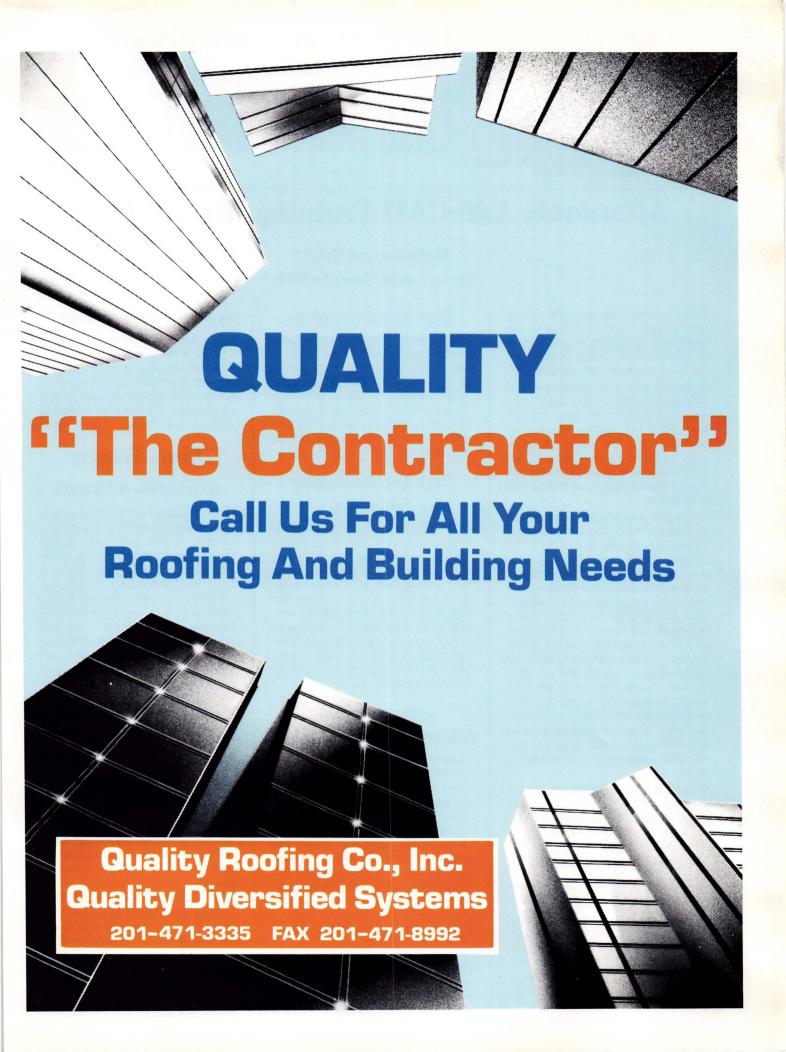
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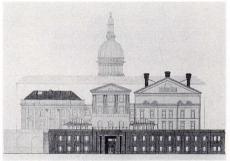
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Katz/Novoa Ar

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Summer Home

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Cover Photo:

Steve Lopez.

Architecture New Jersey (USPS 305-670) is a publication of the New Jersey Society of Architects, a Region of the American Institute of Architects. It covers projects of current interest, news of architects, and issues in architecture. The purpose of the publication is to increase public awareness of the built environment. The publication is distributed to all members of the New Jersey Society of Architects, to consulting engineers, to people in fields related to architecture, and to those leaders in business, commerce, industry, banking, education, religion, and government who are concerned with architecture. Views and opinions expressed in Architecture New Jersey are those of the writers and not necessarily those of the New Jersey Society of Architects.

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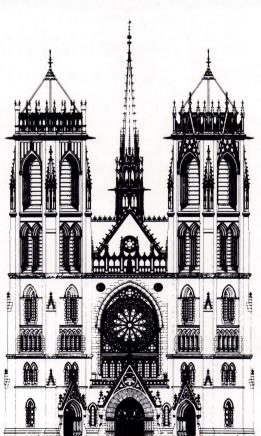
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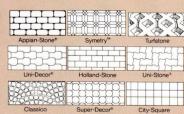
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Additions and Alterations

Like people, buildings change over their lifetimes. A particular addition or alteration project may be a response to modifications in occupancy, lifestyle, technology, fashion, or code standards. Other reasons may include maintenance, repair of fire or other damage, or a desire for period restoration. Such renovation is often less costly than moving or constructing a new building, and it allows the owner to preserve the desirable aspects of the existing building, whether that be the grandeur of the original design, the quality of construction, mature landscaping, or the nature of the site.

For these reasons, and given the abundance of building stock, architects are finding that more and more of their practice involves design of additions and alterations. These projects differ fundamentally in nature from new construction. Whereas a new building may be standardized, the addition or alteration must be a unique design solution. The new building may be detached from its environment; the renovation has a symbiotic relation to what was there before.

This difference affects not only the remodeled buildings, but also entire communities and the lives of their inhabitants. Italian architect Aldo Rossi has examined the richness that results from the layering of architectural history in a palimpsest of urban design. Like superimposed writing on an older manuscript, the images of earlier efforts influence our reading of later work. In renovation too, earlier layers give meaning to the reworking of individual buildings and towns.

continued

Examples of significant additions and alterations abound in the history of architecture. The Louvre, for one, was constructed in stages from 1527 to the present, in styles varying from Medieval to French Renaissance to the Modernism of I.M. Pei (fig. 1). Notre Dame and Chartres, like most medieval cathedrals, were built over a period of several centuries and show the evolution of the Gothic style; Chartres even has two front towers of unmatching design. One of Palladio's most notable civic projects, located in Vicenza, was the construction of a two-story, Renaissance-style loggia around an existing medieval hall.

Perhaps the master of additions and alterations was Michelangelo. In creating the Biblioteca Laurenziana as an addition set on top of the medieval monastery of San Lorenzo, Michelangelo devised a structural system that minimized the impact on the building below, and used traditional Florentine roof tiles to help the new library blend in with the existing cloister. Yet his design was distinctly modern in its time. So too were the Renaissance-style facade alterations that he designed for medieval buildings overlooking his new piazza at the Capitoline Hill in Rome (fig. 2).

Michelangelo's greatest work of architecture, also in Rome, was St. Peter's, probably the paradigm of a building designed over time by various architects (fig. 3). The church was begun by Bramante in 1506, modified by Raphael and Peruzzi in 1514 and by da Sangallo in 1539, then almost completed by Michelangelo in 1546-1564. Since Michelangelo did the designing as construction progressed, the dome was further modified by the engineer Domenico Fontana after Michelangelo's death in 1564. Later, the nave was altered by Carlo Moderna, and the Baroque colonnade and piazza were undertaken by Bernini in 1656.

In England, the architect Sir John Soane showed his design skills with alterations and additions to his own residence at No. 13 Lincoln's Inn Fields (fig. 4). From 1813-1837, Soane substantially renovated three contiguous rowhouses, made additions to the front and rear, and created a laboratory for his design explorations that has since become a mecca for architects.

Our own Capitol Building in Washington, DC, has been reshaped and extended by a series of designers. Yet each new stage has used a neoclassical language compatible with the earlier construction.



Fig. 1—The cool abstraction of Pei's glass pyramid contrasts with the highly textured French Renaissance style of the Louvre, Paris.

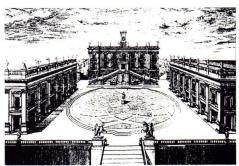


Fig. 2-The Capitoline Hill, Rome, after Michelangelo's renovations.

In contrast, most mid-twentieth-century architectural work in this country embraced a separate vocabulary for new additions. Philip Johnson's addition to McKim, Meade, and White's Boston Public Library is a decidedly Modernist building (fig. 5). Yet its monumental scale and use of limestone allow it to fit comfortably next to the classically styled original. Such transitional Modernism is similar in scale and material to preceding styles, with new fenestration and articulation.

By the 1980s, a more archaeological approach in which the new work replicated the original became acceptable in professional circles (even if not to the National Park service, as outlined in the article "New Additions to Historic Buildings," page 25). With the current waning of Postmodernism and a resurgence of orthodox Modernism, one anticipates a renewed interest in the mid-century approach—new materials and forms that relate to issues other than the existing architectural fabric.

As previous examples demonstrate, establishing the design philosophy for an addition or alteration is a primary, and often difficult, decision for an architect. He or she must consider the nature of the original

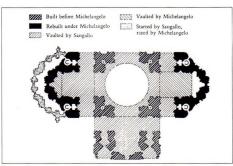


Fig. 3-Plan of St. Peter's in Rome showing the design layers of several architects.

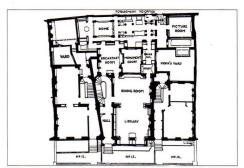


Fig. 4-Plan of Sir John Soane's house, which comprised three London rowhouses.

building and its context, as well as the degree of alteration needed or relative size of the addition. The demands of the program and the architect's own stylistic tastes help determine the concept. Project budgets, too, may influence the design approach.

With all these factors entering into the design equation, the number of ways to design additions and alterations is probably infinite. However, many of them fall into three recognizable categories.

The first approach is to make a clear distinction between the original architectural fabric and the new, often with a minimum of physical connection between the two. This decision may come about for practical reasons, or it may be the choice of the architect. If the original building is deemed to have little stylistic merit, the architect may seize the opportunity to create a strong new visual image. Some architects may express their personal design philosophy regardless of the style of the original building. Such an attitude prevailed in the heroic, mid-century era of Modernism, as part of its quest to break with the past and realize a Utopian vision.

One example of this genre is Michael Graves's 1969 Benacerraf Addition (fig. 6). Distinctly different from the original house,

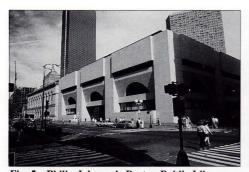


Fig. 5—Philip Johnson's Boston Public Library, a modern addition using similar materials and scale.



Fig. 7—The dining room on the right was added in the 1960s to John Notman's "Prospect".



Fig. 6-Benacerraf Addition, 1969, by Michael Graves.



Fig. 8-Gae Aulenti's renovation for the Museé D'Orsay with the restored ceiling of the old train

it explores dialectical relationships with the site and other references. The addition to John Notman's "Prospect" on the Princeton University campus is another example (fig. 7). A variation on this approach is seen in many interior renovations of New York City lofts, where the old columns, beams, and windows are set up as a neutral backdrop for a new, highly charged scheme of geometries, colors, forms, and materials.

The second design approach is to make the new work exactly replicate the existing architectural vocabulary. Here the architect designs an understated addition or alteration that looks as if it had been part of the original building. Although not a very challenging approach, this one is often the most sensible when the degree of change is minimal. A drawback, though, is that the construction costs of reproducing an historic style can be very high and a comparable level of craftsmanship can be difficult to achieve.

Normally the safest strategy, this second approach backfired in the case of the recent Mitchell/Giurgola scheme for an addition to Louis Kahn's Kimbell Art Museum, located in Forth Worth. A chorus of noted architects protested the design and influenced the museum's board to reconsider the addition. The architects objected that the proposed expansion, copying the original, would dilute the strength of Kahn's design, particularly in its relationship to the landscape.

Most projects, especially those done in the last fifteen years, tend to fall into a third category. This strategy is a hybrid, in which the designer interprets or adapts the existing design vocabulary for the addition. The forms may be similar with different materials, or the architect may repeat the materials but use dissimilar forms. In the hands of a skilled designer, this approach can be very successful.

In this hybrid approach, the design solutions lie along a broad spectrum between the first two approaches. An example might be the Museé D'Orsay renovation in Paris by Gae Aulenti (fig. 8).

Whatever the design strategy, the architect must consider the relationship of the addition or alteration to the original context. Site relationships, scale, amount of original fabric covered over, ornamentation, and articulation all determine the status of new work versus the original. New work may overpower, stand equal to, or hide in the shadow of the original.

As we near the end of the twentieth century, we realize that most of our future building stock has already been constructed. The continued strength of the seventies preservation movement and the weakness of the nineties economy argue against a sixties tear-down-and-replace approach to construction.

But remodeling also has larger implications for the ways in which we build our living environments. It is an incremental process of refinement, at odds with the American frontier tradition of clearing the forest, depleting the soil, and moving on. It is evolutionary, rather than revolutionary.

As a society, we are only now beginning to understand the true costs of development sprawl. Our zoning laws and planning review process are still geared toward consuming virgin land to create yet more suburban tracts, with all their social and environmental failings. For all their good intentions, developers proposing the current "hamlet village" concept are only showing us a better way to pave over the land.

We need a strategy that makes the best use of our existing social and physical infrastructure, of our built heritage. The prudent use of renovation is such a strategy.

The ramifications of an infill approach ultimately outweigh issues of style in the design of additions and alterations. As the New Jersey State Planning Commission has urged, our goal should be to steer development toward better utilization of existing buildings, transportations routes, and utilities systems, so that we can save time, energy, land, and other natural resources. An ongoing attempt to improve our surroundings through renovation is one step toward that goal.

> -Regan Young, AIA Robert Cerutti, AIA

Photo credits: Figures 1 and 8 by Robert Cerutti; Figures 6 and 7 by Nora Odendahl; Figure 5 by Regan Young.

Private Residence, Short Hills, New Jersey

Katz/Novoa Architects and Planners, Millburn, New Jersey

This project included both the complete renovation of a Dutch Colonial house and a substantial new addition. The design was intended to avoid placing new construction at the front, to open up the gardens at the rear and integrate them into the living space, to modernize the house while preserving a traditional ambience, and to rearrange the existing circulation.

Thus, the architects left the front facade intact, replaced the rear walls with french doors, used traditional materials in contemporary ways, and reorganized the circulation by creating a breezeway that links the main structure to a new pool house.

The interior of the existing house was entirely gutted for renovation. Rooms on the main floor were modernized and opened up



Above, a rotunda creates a formal entry to the new pool room. Below, the new L-shaped plan pivots at a rotunda, with guest quarters at the left corner.

to the gardens; rooms on the second floor were reconfigured to create a master bedroom suite; and a guest suite independent of the family living quarters was placed in the attic above the garage.

The new pool house (pictured on facing page) includes a lap pool, bar, sauna, and dressing room. The pool room itself is enclosed by french doors, and the southern face of the roof contains thirty-six electronically operated skylights that provide an almost unobstructed view of the exterior.

1





House on the Main Line, Philadelphia, Pennsylvania

John DeFazio, AIA, Hightstown, New Jersey

For this 1920s stone Colonial home, the architect designed a new breakfast/sitting room and renovated an adjacent kitchen. The addition slides between two existing wings at the rear of the house. Along the southeast living-room wall a new breakfast porch and arbor provide access to the side yard.

Inside, the house's stone walls are left exposed to give the new space the feeling of an enclosed porch. A new opening in one of the walls links the first-floor kitchen to the sitting room, and the bay window of an existing stair landing is opened up to overlook the sitting area. A concave clerestory window mirrors the curve of the new balcony and brings light down into the eighteen-foot-high space.

Over the breakfast area, the ceiling drops to ten feet. This room bays out beyond the two wings of the house. The combined effect of the concave clerestory and the convex bay window is that of a circular canopy hovering in a still-higher enclosed space.



Princeton Montessori Society, Princeton, New Jersey

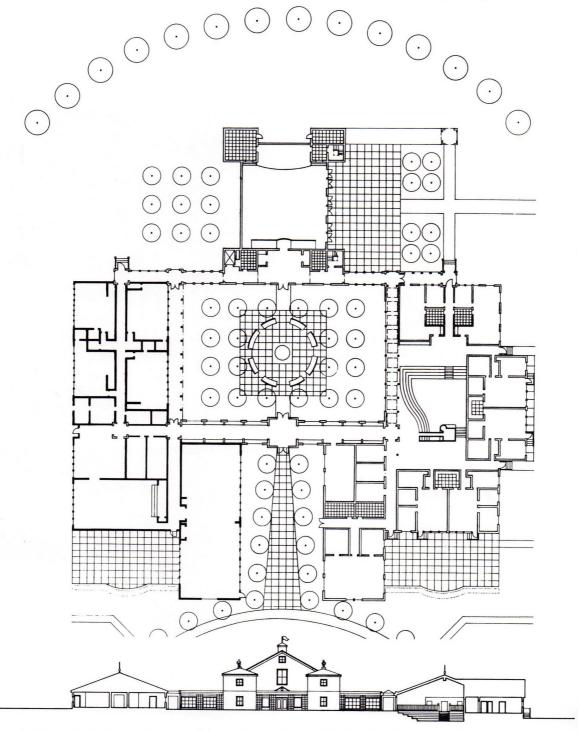
Michael Burns, AIA, Rocky Hill, New Jersey

The Princeton Montessori Society, an alternative school, commissioned a master plan to expand its current home. The original and only building on the open, fourteenacre site is an institutional interpretation of the suburban ranch. The proposed plan gives the school a presence on the street, a distinct entry sequence, and landscaping, as well as new buildings.

The new middle school (on the right) is housed in a one-story building that flanks the existing one (on the left). This addition provides a gateway to the new main entry via a crescent drive, and helps form a courtyard. Classroom pods are arranged around a sunken amphitheatre.

On axis with the new entry sequence is a two-story, barn-like building with four corner service pavilions. It houses art studios and a theatre.

A circulation spine, part interior and part exterior, wraps the courtyard. An applied lattice screen of stained wood ties the circulation spine together.

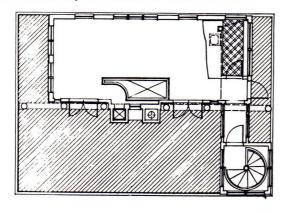


An introverted cluster reminiscent of a farmstead centers the school in the midst of its landscaped surroundings, which include groves of trees and a wildflower meadow.

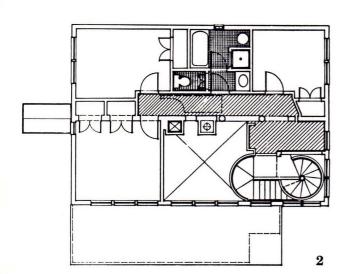
Summer Home, Dover Township, New Jersey

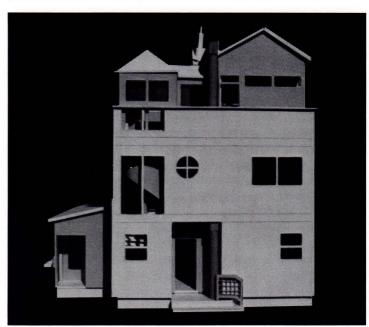
Frederick Schmitt Architect, Metuchen, New Jersey

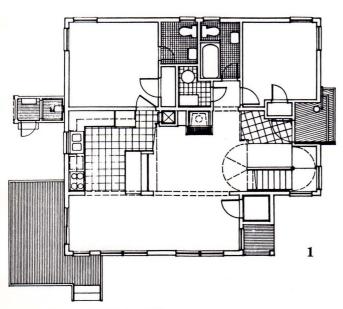
Since the small site of this one-story house prohibited any horizontal addition, the design instead calls for vertical construction that not only adds rooms but also creates a roof terrace with views of both Barnegat Bay and the Atlantic. The original number of bedrooms, three, was doubled. Formally, the building is treated as a block with the new third-floor penthouse and an existing first-floor addition seen as additive elements. An existing central bearing wall permits elaboration of a bisecting plane, which is revealed at key positions in the sequence throughout the house—at the new entry, at the second-floor balcony, and finally at the terrace and penthouse level.

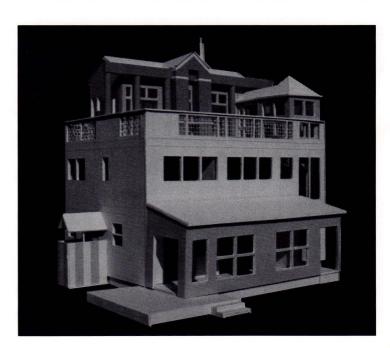


A new roof terrace is complemented by a penthouse with a bar, served by a dumbwaiter to the kitchen below. The penthouse, recessed from the north (street side) wall of the house, can also be used as an extra bedroom.









16 Architecture New Jersey 90:5

Morgan, Cohen, and Weinstein Residences, Margate and Loveladies, New Jersey

Michael Ryan Architects, Loveladies, New Jersey

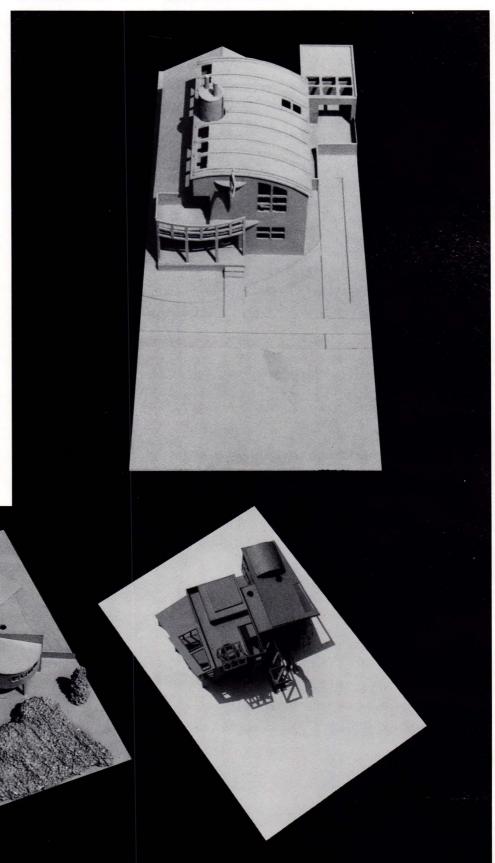
In these three renovation/addition projects, vacation homes take on an entirely new style. The architect describes his treatment of the existing buildings as a mixture of "respect and irreverence."

Changes to the Morgan Residence involved a second-floor addition to a stucco building with a side-gabled roof. The addition creates a master bedroom that is a barrel-vaulted loft space with clerestory lighting. A curved deck opens off the bedroom to face the street. Part of the existing garage becomes an outdoor eating area, shaded by latticework.

The Cohen Residence was a two-story rectangle with a simple gabled roof. A second-floor master suite, with a partially barrel-vaulted roof, was added to the living level of this upside-down house. This section extends out to view the bay; the slope of the wall is due to the use of existing pilings. The entrance was moved to the actual front of the house, where a trellis and existing pine trees mark the door. The design also includes a roof terrace with trellised spa.

For the sculptor owner of the Weinstein residence, the architect designed a curved studio (lower left) in front with a stair to the street for visitors. In the center is a windowed gallery that connects to a curved sitting room. The master bedroom lies under a wedge-shaped roof.

Additions can transform the image of a simple seashore house. Above, the Morgan Residence; below left, the Weinstein Residence; below right, the Cohen Residence.



Children's Seashore House, Atlantic City, New Jersey

Sykes O'Connor Salerno Hazaveh, Atlantic City, New Jersey



This former Coast Guard Station houses an outpatient clinic that offers evaluation and treatment for children, from infants to young teens. The renovation/addition was intended to make the clinic appear friendly and as little like an institution as possible.

The design preserves the tower as a focal point of the building and converts it to an entrance foyer. By taking out upper floors in the tower, the architects created a light core at this entrance.

Changes also include a new gable, extended roofline, and added floor space. Dormers and cedar shingles echo local seashore style.

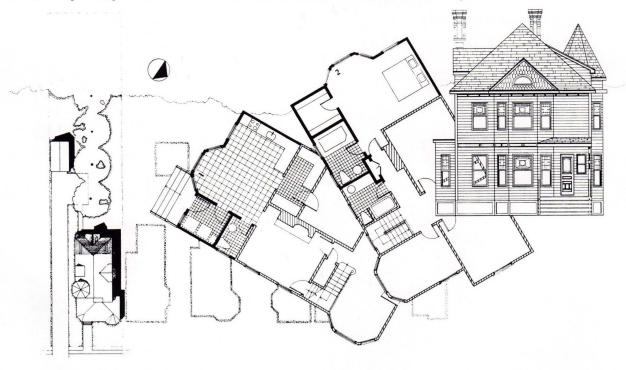
Inside, the walls are painted in soft colors and a motif of seashells and sailboat decorates the hallways. A desk resembles a stack of Lego blocks. Fixtures and furniture used by patients are scaled to a child's

White/Funatsu Residence, Westfield, New Jersey

Parette and Associates, P.C., Morristown, New Jersey

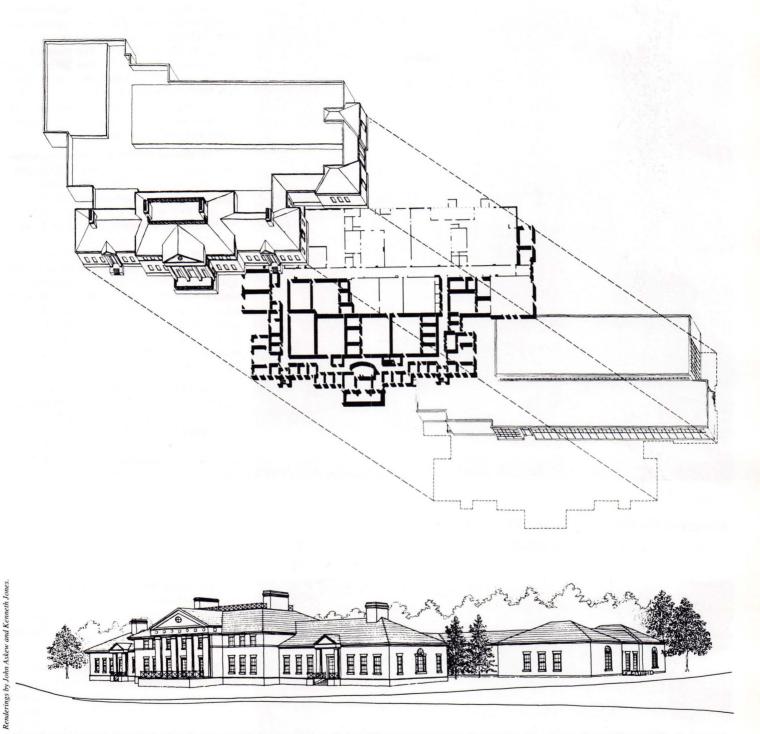
The project involved both the addition of space and the restoration of Victorian detailing, including removal of aluminum siding and modern paneling. Within the confines of this long, narrow suburban lot a new kitchen, laundry, and bathroom have been added to the first floor, and a new master bedroom suite has been added

above. The design converts a bedroom to a studio/office and a kitchen into a family room, with a disused fireplace opened up again.



Armstrong Hall, Trenton State College, Ewing Township, New Jersey

Nadaskay/Kopelson, Morristown, New Jersey



Prominently located, the existing facade presented little more than an industrial appearance to people entering the campus. Its exterior restyling is due to the college's desire to use the Georgian model for current and future architectural development.

Constructed in the late 1950s as a technical school, this modern-style building now required mechanical renovation and additional lab space in order to serve as a school of engineering. The college also wanted it to conform to the Georgian style of the original campus buildings.

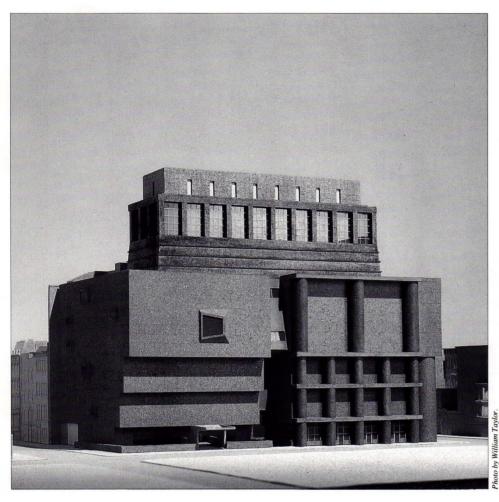
Overlooking a lake, Armstrong Hall faces adjacent public roads and terminates the campus's main entrance. The highly visible front and side facades, therefore, are the focus of the design; the new additions wrap around the existing structure on these two sides. The walls are brick, with colonnades,

pediments, and molded trim, all surmounted by a slate roof.

The interior of the addition extends the existing circulation. Faculty offices are along the exterior walls, with classrooms and laboratories at the center and mechanical systems on the second floor.

Whitney Museum of American Art, New York, New York

Michael Graves, Architect, Princeton, New Jersey



The Whitney Museum of American Art, located at the corner of Madison Avenue and East 75th Street, occupies a building designed by Marcel Breuer. The planned expansion extends down to East 74th Street. The site is located within the Upper East Side Historic District and the Special Madison Avenue Preservation District and is therefore subject to certain zoning requirements and design guidelines.

The Breuer building, a modern monument finished in dark-gray unpolished granite, contrasts stylistically with its context of smaller-scale and more elaborated facades. In order to make the old and new sections legible as one museum, as required, both halves had to be bound together in plan and elevation. Therefore, the major planes of the addition's exterior walls are clad in gray-red agate granite whose tonality and veining is similar to the existing gray granite. The new addition maintains the traditional sidewalk edge, and a recess between the existing facade and new construction helps set the museum apart from its urban context, as Breuer intended.

The addition includes new exhibition space, a 250-seat theatre, an orientation gallery, a Works on Paper Study Center, an expanded library, and space for offices and operations. As required by zoning laws, commercial retail space lies along Madison Avenue at the ground level.

Remner Residence, Point Pleasant, New Jersey Carla Bonacci, AIA, Westfield, New Jersey



This house sits among a group of similarly-sized homes with views of the bay and the Atlantic. The owners wanted to expand the small upstairs bedrooms and add a full bath.

Taking the nineteenth-century shingle style as inspiration, the architect created new exterior space with a front porch that is split in the center by the entrance. The porch is enclosed by columns and latticework. Along with two new bathrooms is added a terrace on the second floor with views of the ocean. Terrace doors provide cross-ventilation in the bedrooms.

West End Avenue Building, Somerville, New Jersey

Robert N. Auld, AIA, Somerville, New Jersey



A Victorian home with garage lent itself surprisingly well to the creation of office suites, including an architect's office (pictured). The architect used cedar shingles and clapboard in an effort to restore the exterior to its original appearance.

In turning this house and detached garage into four office suites, the architect tried to preserve the residential character of the building and its surrounding neighborhood. The new addition was therefore placed between the house and garage, and new windows and infill panels on the garage suggest the motif of three garage doors.

Inside, the existing kitchen became the main entry to the office suites. This twostory space, adjacent to a horseshoe drive, features floor-to-ceiling windows. Each suite has its own entry and mechanical systems.

On the first floor, the living room became the drafting area for the architectural firm, and the dining room became the architect's office. Pocket doors separate the two areas. A library, with its original shelving retained, became a library/conference room.

The second-floor bedrooms and bathrooms became an office suite with a central reception area, while the garage was turned into office space. The addition forms a separate suite.

The architect tried to keep as much of the original interior detail as possible, including wooden floors, glass fireplaces, and window seats.



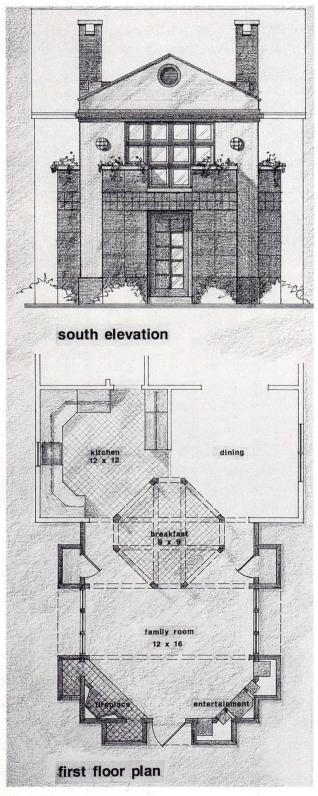
Private Residence, Ridgefield Park, New Jersey

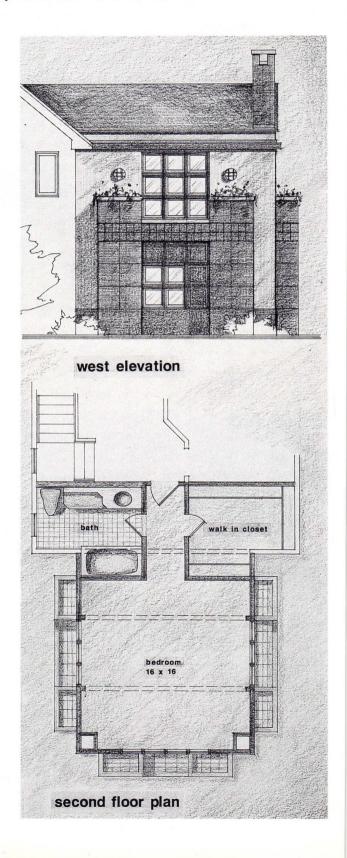
Albert F. Zaccone, AIA, Ridgefield Park, New Jersey

The original building at this site was a two-story Colonial Revival house dating from around the 1920s. The owners desired an addition in more contemporary style to accommodate new breakfast and family rooms on the first floor and a new masterbedroom suite on the second floor.

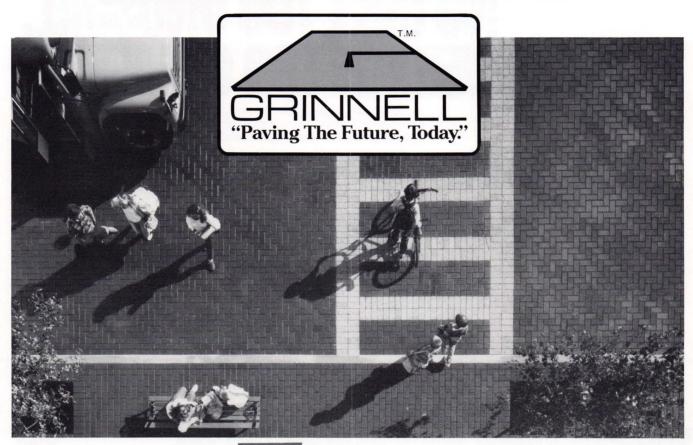
To create an informal and open atmosphere, the family room was placed next to

the breakfast and kitchen areas. Above, one of the existing bedrooms was turned into a bathroom and a walk-in closet. On the exterior, the addition features a pattern that plays upon grids.





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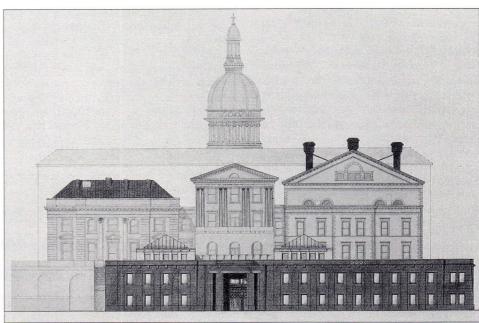


New Additions to Historic Buildings: The Basis for Change and Measure of Good Work

by Sharon Ayn McHugh

Despite the increasing professionalization of historic preservation, much work of the past decade clearly indicates that architects remain to a large degree uninformed about the mission of preservation. Three recent projects that clearly lack the spirit of good preservation work are Kevin Roche's Addition to the Jewish Museum, Romaldo Giurgola's proposed Addition to the Kimbell Art Museum, and HTB Inc.'s Addition to the Cosden Building. Although each of these projects may have merit on certain grounds, the essence of the work (in each case replication) is decidedly antithetical to preservation.

Noted preservationist James Marston Fitch, Hon. AIA, attributes the lack of a shared agenda among architects and preservationists to the fact that "architects are fundamentally creators, and preservationists curators." Fitch points out that "while architects study old buildings to copy them, preservationists study buildings to preserve them." As a result of this philosophical difference, architects, in designing new additions to historic buildings, often mistak-



The 30,000 square foot addition to the State House provides offices for legislative partisan staff.

enly adhere to their own design predilections rather than to professional standards of preservation practice.

To assist architects in designing new additions to historic buildings, the Preservation Assistance Division of the National Park Service has issued two invaluable publications. The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings is the principle document that guides preservation practice in the United States. Initially developed to guide the review process at the state and federal level for preservation-taxcredit certification projects and rehabilitation work on properties listed on the National Register of Historic Places, the standards are now widely adopted by municipal governments to enforce local preservation ordinances. The standards give architects the criteria by which all rehabilitation work, including additions, will be evaluated and offer guidance on how to proceed.

The position on additions embraced by the standards is that since additions may alter character-defining features of historic buildings, they should be considered only after a concerted effort has been made to satisfy new space requirements by altering interior space that has no historic significance. Once a determination is made that a new addition is an appropriate approach, the preservation concern shifts to broader issues of design compatibility.

A new addition to a historic building is considered compatible within the framework of the standards if it: 1) Preserves significant materials; 2) Preserves the his-



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toric character; and 3) Protects the historical significance by making a visual distinction between the old and new. Clearly the measure of "compatibility" is how well the new design work protects and is informed by the building's historical significance.

To assist architects in complying with the standards, the National Park Service developed Preservation Brief 14, New Additions to Historic Buildings: Preservation Concerns, which illustrates, through casestudy examples, a range of acceptable and unacceptable approaches to additions. Amply supported by photographs, the case studies illustrate that many modes of expression are permissible, and that design principles do not have to be sacrificed for preservation principles. However, it is equally obvious that good design is no more a measure of good preservation than good preservation is a measure of good design.

Clearly, the standards and brief are not intended to restrict design creativity, but rather to foster it in a responsible fashion. The more successful additions are those that

The more successful additions are those that achieve a delicate balance between being sympathetic to the old and having design interest of their own.

achieve a delicate balance between being sympathetic to the old and having design interest of their own. Close to home, the new addition to the New Jersey State House, by Short and Ford / Johnson Jones Architects, is an example of work that achieves this balance.

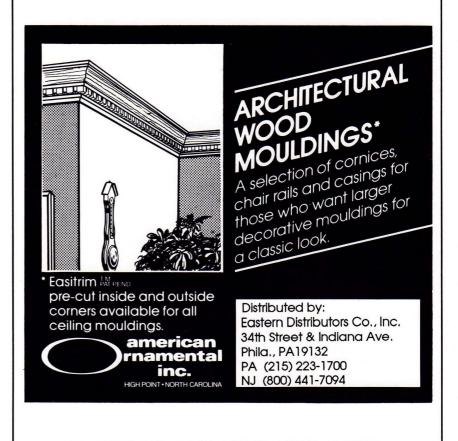
From the decision to add to the design direction taken, the project demonstrates a sensitivity to both preservation and architectural issues. The addition, which provides offices for legislative staff, was predicated largely on the need to preserve significant interior spaces, but was also a good programmatic solution. According to Walter Maykowskyj, project architect in charge of programming, "The legislative staff requires power, telecommunications, and flexible space to function." Previously, when the legislative staff was located in the State House, "those needs were met in three ways, each of which was at the expense of

preservation. Dropped ceilings, added to provide plenum space, altered the proportions of rooms and compromised decorative finishes. Elsewhere, where decorative surfaces were retained, wiring was introduced through decorative surfaces or left exposed; in both cases the overall aesthetic appearance was compromised. Lastly, as the legislative staff is constantly reorganizing, frequent subdivision of space sometimes resulted in the loss of historic rooms in their entirety... The alternative to the addition was to continue providing space for legislative staff within the State House, but that approach, as demonstrated through past efforts, was neither desirable or appropriate."

According to Matt Chalifoux, an architect for the restoration work, "The decision of where to build was one of the most difficult aspects of the project." He says that in addition to the building's historic importance, "Studies indicated that the site was archaeologically sensitive...The addition also needed to be well located near the Legislature." In response to these concerns, a decision was made to accommodate the new addition by removing a power house added to the State House around 1900, on the basis that it was insignificant and served no real function.

Continued on page 28

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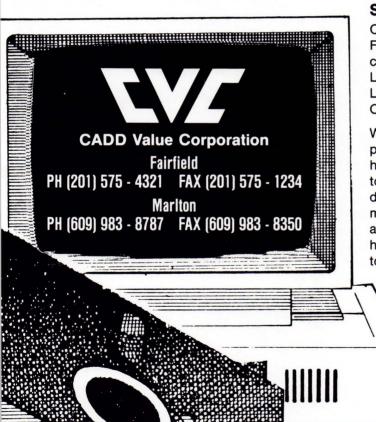
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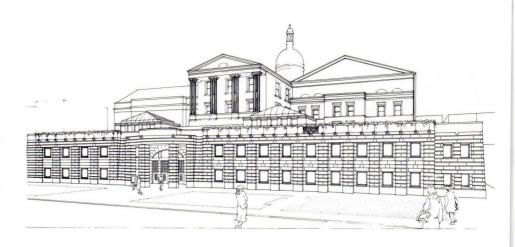
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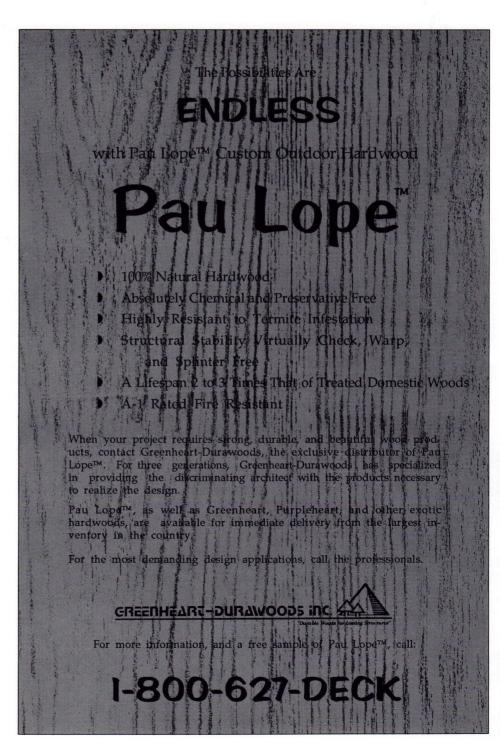
New Additions to Historic Buildings: The Basis for Change and Measure of Good Work

Continued from page 26

In the opinion of Terry Pfoutz, supervisor of the Review and Compliance Section of the Office of New Jersey Heritage, "The project is successful because the new work is based on informed design decisions, informed preservation decisions, and informed intervention decisions." Adds Chalifoux, "The new design strives to be obviously modern yet in keeping with the historic block of the State House." He sees the new work as respecting the old in its materials, massing, and details. However, Chalifoux also notes that "the new work is obviously different from the old work in its fenestration, the detailing of the granite work, and the treatment of the roof.'

Whether or not one likes the addition to the State House is clearly not the issue. The project is a benchmark for preservation. It illustrates how a proper methodological approach—where the history of the building is understood, the existing conditions properly documented, technical problems properly diagnosed, and treatments properly prescribed—led to a design solution that is appropriate and specific to the concerns of this project. The new addition, which is intended to read as a base for the entire building, provides scale for the street and unifies the disparate parts of the building complex without embellishing or improving upon the essential qualities of an important and highly visible historic building.





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Illegal Architecture

by Albert F. Zaccone, AIA

If, as architects, we wish to put an end to the practice of architecture by unqualified and unlicensed people, we first need to recognize how urgent the problem is. The evidence is all around us. One finds phone listings for contractors who offer free design or "architectural services." One sees articles in major newspapers that highlight design work by a builder. And I myself had heard construction officials say that they would accept plans from either an architect or an engineer, so long as the plans have a seal; or that a permit could be issued after code review, with no questions asked, as long as the homeowner had signed the affidavit on the Uniform Code Compliance folder.

As a result of such lax enforcement, houses, additions, and even small commercial spaces have been designed by just about anyone with a straightedge—from a contractor, to a decorator, to an acquaintance who once took a drafting course in high school. To take one instance from my own architectural practice: A contractor friend of my client copied my plans and took out the building permit for a home alteration

and addition. When confronted in a meeting with the client, construction official, and me, the contractor stated that he prepared the drawings for all his work. Both the local Building Department and the State Board of Architects, with whom I registered complaints, concluded that they could not establish whether the contractor's plans had been prepared before or after mine. What they overlooked was that the contractor had been practicing architecture without a licence.

Another instance demonstrates how the problem affects the public as well as architects. A home for which I was designing an addition and alterations had had previous structural work done by a contracting firm. This previous work had deflected a girder and caused sagging joists, uneven floors, and poorly fitting windows and doors. As instructed by the previous contractor, the homeowner had signed the affidavit on the UCC folder and had therefore become solely responsible for the work. But the contracting firm had gone out of business, so that the homeowner had to pay over \$8,000 for corrective work.

Many other architects report similar experiences. In response, the Architects League of Northern New Jersey set up a committee to determine what kind of remedies are needed. The committee has urged that architects start by taking these seven measures:

- 1. Get explicit direction from the State Board of Architects as to what constitutes the practice of architecture and who may practice it. Inform the public, as a matter of consumer safety, about the importance of using a professional architect.
- 2. Urge the different branches of media not to promote illegal practice by publishing ads or articles indicating that anyone, officially qualified or not, can offer architectural design services.
- 3. Inform advertising media, such as the Yellow Pages and Contractors' Blue Book, of instances of illegal advertising and of the laws governing architectural practice.
- 4. Encourage construction officials to

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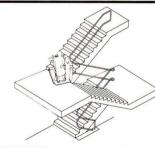
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- ask owners whether they fully understand the ramifications of accepting total responsibility for the construction.
- Ask architectural schools to tell their students that students cannot design buildings, are not licensed to do so, and may be jeopardizing their chances to qualify for the licensing examination.
- Get the Department of Community Affairs and the Division of Consumer Affairs to coordinate, in the interest of public welfare, actions against persons practicing architecture without a license.
- 7. Educate architects. Over 6,500 people hold a New Jersey license to practice architecture. Since

NJSA represents only about onequarter of this group, the State Board *must* be the vehicle through which the remaining architects are contacted. All architects need to be brought up to date on the changes governing architectural practice, A/E laws, certificates of authorization, examination information, and investigative actions.

Other measures, too, could assist in curbing illegal practice. Lending institutions could deny loans for construction or home improvement if the structure were not designed by a licensed architect. Insurers of buildings could offer lower premiums to structures that are safer because they have been designed by professional architects. Construction and fire officials could be shown that good construction documents are useful in combatting medical and fire emergencies. And at the time of resale, owners and real-estate agents could emphasize the superior value of an architect-designed building.

Although exact statistics are hard to calculate, the problem of illegal architectural practice is clearly widespread. Conservatively speaking, one can estimate that ninety percent of the general public cannot legally design a structure by themselves. Try this experiment: go to the local building department and ask to see all the plans granted permits over the past six months. See how many structures were designed by a properly licensed professional. Then, consider the number of projects undertaken without any construction permit.

Architects need to take an interest in the credibility of their profession. must not allow the profession's integrity to be undermined by people who do not share their dedication. Together, architects, the State Board, media, and construction officials can join in educating the public about the values of the architectural profession.

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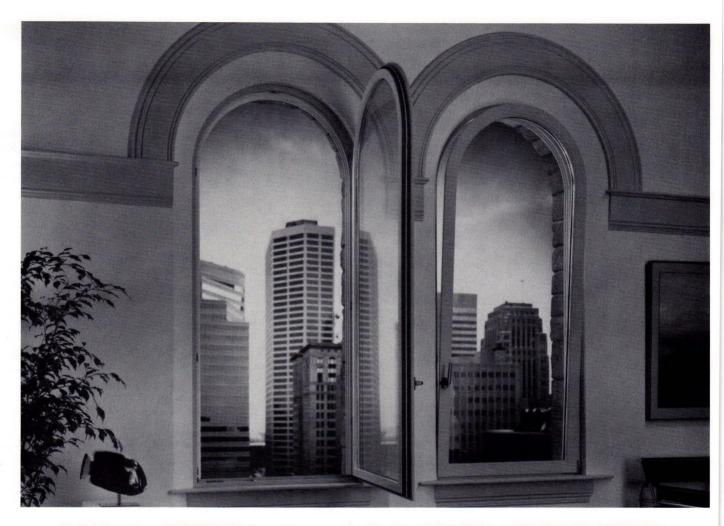
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Albert F. Zaccone, AIA, is an architect practicing in Ridgefield and a member of the Architects League of Northern New Jersey.



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Development Versus the Environment: The Pinelands

by Robert Bembridge

"... I was in the pines because I found it hard to believe that so much unbroken forest could still exist so near the big Eastern cities, and I wanted to see it while it was still there."

In a 1968 book, The Pine Barrens, author John McPhee described the fragility of a wilderness unique in its biology, geology, culture, and scenery. The sense of urgency expressed by McPhee and conservationists then invigorated efforts to protect New Jersey's Pinelands, the last vast tract of open space in the Richmond-to-Boston megalopolis.

The popular success of McPhee's book broadened public support during the 1970s for Pinelands protection. The construction of new homes and businesses had been steadily breaking up large forested areas in the Pinelands during the 1950s and 1960s. This trend accelerated in the 1970s with the advent of casino gambling in Atlantic City.

In 1978 Congress responded to public demands to protect the region by adopting the National Parks and Recreation Act which designated the Pinelands as the country's first National Reserve. This legislation authorized the expenditure of \$26 million in federal money for land acquisition and planning and requested New Jersey officials to develop a suitable land use plan for the

The comprehensive management plan, then, has clearly succeeded in channeling growth into suitable areas of the Pinelands. But what of the development standards themselves?

region. The national reserve concept gave federal, state, and local governments a role in designing and implementing that plan. On February 8, 1979, Governor Brendan Byrne established the fifteen-member Pinelands Commission and instituted temporary development controls in the Pinelands while the Commission developed a plan to protect the region.

In June 1979 the New Jersey Legislature passed the Pinelands Protection Act, one of the most important and controversial pieces of legislation in state history. The Pinelands Protection Act created the 937,000-acre state Pinelands Area and established guidelines for the Commission in developing its plan.

The comprehensive management plan adopted by the Pinelands Commission in November 1980 was the first successful regional approach to land-use planning in the Pinelands. The plan designated a 337,000-square-acre preservation area district where only low-intensity development

Continued on page 35

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Alterations Not Included

by Michael Greenberg, AIA, CSI

In purchasing a garment such as a suit or a dress, we can easily understand the meaning of "alterations included." We select an item and the tailor makes some adjustments. When completed, the garment has been altered to suit our specific size requirements, and we can wear it. If only a building alteration could be so simple.

To see how the process of altering a building works, let us take a hypothetical example. The owner has already selected a space in an occupied building to be used for commercial offices with minor service requirements. The setting for our example is an older building, which is typical but not always the case, as alterations can sometimes be needed in new buildings. For our purposes, budgetary concerns are not primary.

The decision to move is when the fun begins, and it doesn't end until the last scratch is touched up, if then. Everyone is, or should be, involved from beginning to end: the owner/user and his or her management team, the architect and architect's consultants, the contractor, and both building managers. (Moving out is sometimes more difficult than moving in.)

Designing the Space

Some owners are adept at selecting appropriate spaces, but others commit themselves to a space with little idea of how it will satisfy their requirements. They expect the architect to make it work. (And architects have made ingenious, creative adaptations of rather horrible and unsuitable spaces.)

Whatever the given space, the owner must have a clear idea of current and projected needs in order for the architect to develop a realistic program. The architect must make every possible attempt to elicit from the client all relevant criteria and to develop a clear understanding of how the business runs, its priorities and goals. Only then can the architect speak with conviction in presenting the design solution.

Once the program is fixed, it is up to the architect to match the program to the space. When physical modifications are included, the term alteration applies (or altercation, if it comes to that).

Alterations have special constraints. An architect's design may call for the removal of walls, but structural requirements may

negate that idea. The design may rearrange or introduce new services, but sometimes with severe limitations. A building can be structurally reinforced to accommodate a piece of equipment, but sometimes the equipment can't be gotten into the building. Owner and architect may agree that some specific type of window treatment is desirable, but when the overall building facade is taken into account, the landlord may disagree.

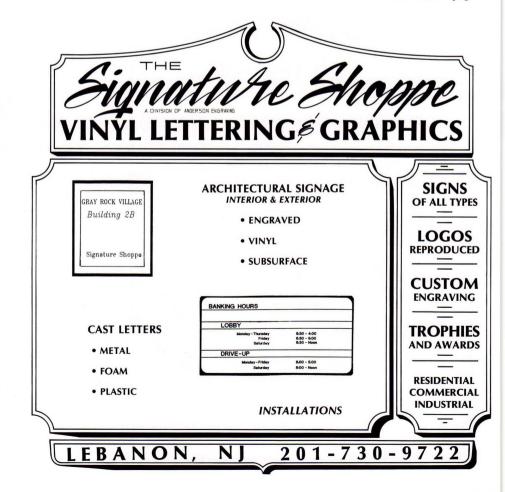
Once the architect's design is completed and the construction contract is awarded, the design process is not over but should be kept quietly simmering in the back of the mind.

Once the architect's design is completed and the construction contract is awarded, the design process is not over, but should be kept quietly simmering in the back of the mind. The architect—and owner as well—has to be agile should some unexpected surprise occur once construction begins. For example, on one alteration consisting of two entire floors in a large, pre-war New York City building, a nine-foot truss was uncovered during demolition. The architect quickly brought this problem to the attention of the owner, and was wisely prepared with some thumbnail sketches of alternatives to the original design.

Building the Space

Anyone who thinks that the construction process for previously occupied space in an existing building differs little from constructing new space in a new building (or one that is under construction) should just move into a tent without walls. In an alteration, when the space is in an occupied building, the logistics affecting the performance of the work are sometimes as critical as the work itself.

Continued on page 36



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Development Versus the Environment: The Pinelands Continued from page 33

such as berry agriculture and commercial forestry would be allowed. In the surrounding protection area various degrees of development were permitted depending on the suitability of the land to sustain that development. For example, heavily forested areas and farmland within the protection area could accept only new development that would preserve the essential character of those areas. More heavily developed areas were allowed to continue to grow, subject to certain environmental standards set forth in the Pinelands comprehensive management plan.

How successful has this experiment in land use planning been? The answer is partially found by looking at where development has occurred and where it has not occurred. Since the comprehensive management plan took effect in January 1981, nearly all the new homes approved in the Pinelands have been sited in the outer protection area. The plan allows for the eventual construction of up to 184,000 new homes in the Pinelands Area, most of these in regional growth areas within the protection area.

The comprehensive management plan, then, has clearly succeeded in channeling growth into suitable areas of the Pinelands. But what of the development standards themselves? Do these standards ensure that all new construction will be compatible with the environment?

The development standards only partially succeed in this respect, due to the inherent incompatibility of growth and preservation. The Pinelands Commission rejected a proposal by the development community to base the plan largely on "performance standards" rather than growth management. Yet the plan does contain environmental protection standards that are among the most stringent in the nation. These standards include a 300-foot buffer from wetlands areas for most forms of development. To maintain the nearly pristine quality of Pinelands water resources, sewerage connections or innovative septic systems are required for building lots smaller than 3.2 acres.

The comprehensive management plan also prohibits unnecessary clearing for approved construction projects. New homes along major rural roads must be placed at least 200 feet from the center line of the roadway. New construction is prohibited in areas where it would have an adverse impact on local populations of any one of fifty-four plant species and thirty-nine animal species threatened with extinction in New Jersey.

That these development restrictions in the nation's most heavily urbanized state faced strong opposition from developers and some vacant land owners came as no surprise. However, the Pinelands Commission's ability to balance preservation goals with reasonable growth demands continues to be eyed as a model for similar efforts elsewhere. The new edition of a textbook on zoning by land-use experts Richard Babcock and Charles Siemon calls the Pinelands protection plan "by all accounts a great success." In December 1986 the New Jersey Society of Architects honored the Pinelands Commission for "outstanding accomplishment in the public interest" through its programs protecting wetlands, vegetation, fish, wildlife, ground water, air quality, and his-

In 1983 the Pinelands was designated an

Continued on page 38

First, the owner, architect, and contractor usually have to deal with a building manager or superintendent. The manager's main function is to maintain the smooth and continuous operation of the building and accommodate the tenants' needs.

A second issue is moving workers and material in and out of the building. For example, will an elevator be used? Is it the freight elevator or the passenger elevator? In both cases, the elevator's floor and walls will have to be protected. And is the elevator large enough? All too often workers try to hoist something up a floor by putting it on top of the elevator cab.

Moreover, where do workers enter the building and how do they get up to the construction space? Often the route is confined to service or secondary spaces, and requires many extra feet of transit—perhaps going down a level or two, walking across, and then going up. Such complications add time, protection requirements, and cost to the project.

Paralleling route considerations is a third concern, scheduling. The elevator may not be available during some hours of the typical workday. Noise and vibration-producing operations will most certainly be restricted during all phases of work. In many types of alterations, the normal working hours of the occupants will also affect project construction. A crucial procedure may have to be scheduled at a specific time so it can be completed within these hours. In banks, however, the opposite is true. Much of the construction work has to be done during the hours that the public does not have the use of the facility. In this case, overtime work is an important cost factor.

In an alteration, when the space is in an occupied building, the logistics affecting the performance of the work are sometimes as critical as the work itself.

A fourth category is temporary facilities. Where are the power and water and how are they paid for during construction? How will materials, tools, and work clothes be stored, and who is responsible for security, if that is a concern? Toilet facilities are important, especially if there are existing toilets in the construction space, because quite often they are used for purposes other than the usual ones. These facilities should not be used for changing clothes, and emphatically not for cleaning tools. Last, temperature and building controls require attention, particularly if the existing building system is employed either partially or totally for construction. Existing machinery will have to be inspected and filters should be changed.

During construction, the architect looks at the ongoing process and knows that someday it will end. The space will be cleaned; defects will be corrected; all remnants of construction materials and debris will be gone; furnishings will be moved in; and the owner will begin to use the space. The architect expects some minor callbacks and adjustments, but hopes they will be few and will be dispatched quickly.

Continued on page 39

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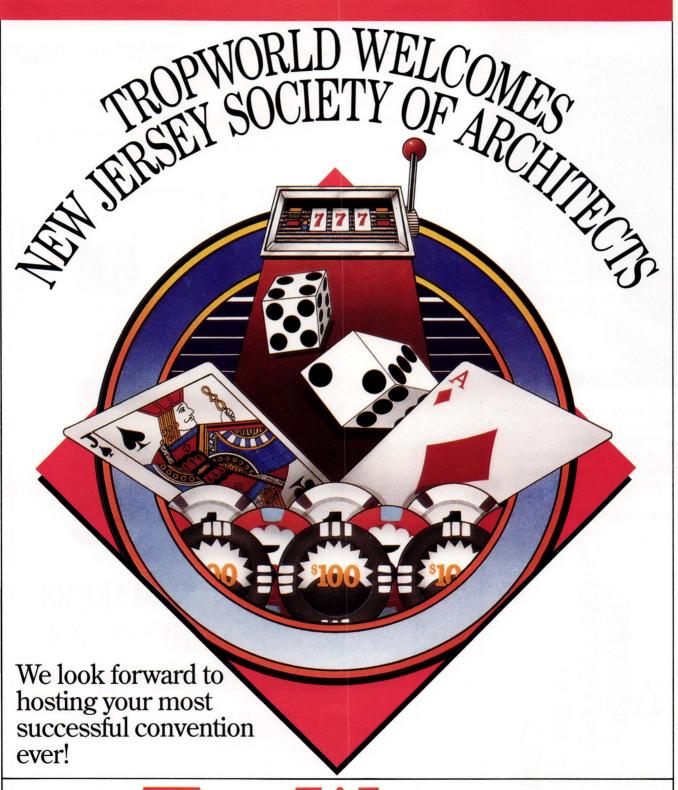
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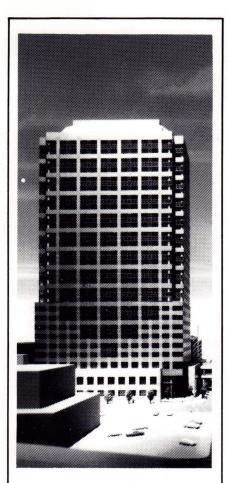
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Development Versus the Environment: The Pinelands

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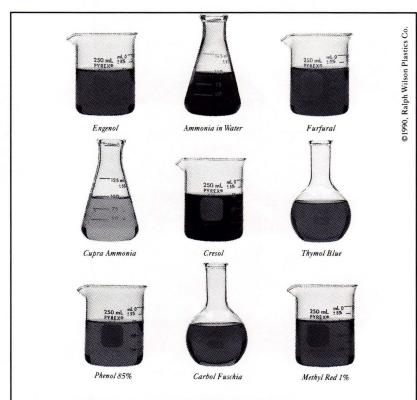
international "biosphere reserve" by the United Nations Educational, Scientific and Cultural Organization. This designation helped focus international scientific attention on the region.

Almost a quarter century ago, McPhee ended his book by warning: "At the rate of a few hundred yards or even a mile or so each year, the perimeter of the pines contracts." One expects that, had the book been written

today, it would have concluded less ominously.

Robert Bembridge is manager of public programs for the Pinelands Commission.

More information on the Pinelands Comprehensive Management Plan may be obtained by writing to the Pinelands Commission, P.O. Box 7, New Lisbon, New Jersey 08064.



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Alterations Not Included Continued from page 36

However, sometimes the troublespot, like a nagging toothache, lingers. On one project in which I was involved, the client complained that he wasn't getting enough air from the ceiling light/diffuser in his office. and that parts of the ceiling tile gave out a strange hiss. We tried everything and examined everything. Finally our engineer observed that the air pressure coming from the duct was unusually high (it was then adjusted), and that it was forcing the flexible sleeve to become slightly misaligned with the diffuser head. Someone had cut the sleeve too short, just as the tailor did to my last suit.

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James M. Gilsenan, AIA; Vasant Kshirsagar, AIA; and Joan C. Ross have been promoted from the position of associate partners to principals of The Grad Partnership, Newark. Mr. Gilsenan heads the educational facilities design team, Mr. Kshirsagar directs the group specializing in health care facilities, and Ms. Ross is in charge of the interior architecture division.

Peter Hoyt, AIA, has been elected to partnership at CUH2A, Princeton.

Michael J. Konsko, AIA, is the new assistant director of architecture at CUH2A, Princeton.

Anthony J. Ferrantello, AIA, CSI, announces the opening of his new Madison office for the practice of architecture and site planning.

Brian Kowalchuk, AIA, has joined Michael Landau Associates, P.A., of Princeton as a principal architect.

Vincent A. Piacente, AIA, of Inside Architecture, P.C., announces the relocation of his firm from Princeton to new offices in Ringoes.

John C. Chadwick, AIA, RIBA, has been named associate partner of Ronald Schmidt & Associates, P.A., Hackensack.

William R. Miller III, AIA, has rejoined USA Architects, Planners and Interior Designers of Somerville as an associate.

John W. Gibson, Jr., AIA, has joined the staff of the Tarquini Organization of Camden as director of the educational facilities studio.

Carmine Cerminara, AIA, has announced the opening of his architectural and planning firm in Bridgewater.

J. Robert Hillier, FAIA, of The Hillier Group, Princeton, recently was a guest panelist in discussions sponsored by two industry organizations, the Society for Marketing Professional Services and the New Jersey Subcontractors Association, to address issues regarding client and business development (SMPS) and the role of the subcontractor in construction projects (NJSA).



James M. Gilsenan, Joan C. Ross, B. Allen Trousdale, and Vasant Kshirsagar

Architecture New Jersey 1991 Editorial Calendar

91:1	NJSA Design Awards	
F	Projects honored at the 1990 NJSA	

Convention. 91:2 Current Work

Recently completed and still-onthe-boards projects by NJSA members.

91:3 Architecture for Young and Old Daycare, education, retirement, nursing home, and cemetery projects.

91:4 Unbuilt New Jersey Unrealized gems from the members' deadfile drawers.

91:5 The Jersey House An exploration of the unique and common house forms in our state.

91:6 Architecture for Justice Prisons, detention centers, courthouses, police stations, and related buildings.

Submission Deadlines

8 November 1990

31 December 1990

1 March 1991

1 May 1991

1 July 1991

30 August 1991